Digital Customer Experience Trends in 2025

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Table of contents

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Introduction

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The world is filled with digital solutions. In 2024, the number of apps available for Android or iOS surpasses 5 million. And on the web alone, you can visit approximately 1.13 billion websites (good luck with that)!

Of course, not all of these solutions are business-oriented. However, many, MANY of them are.

Data and statistics aside – you've probably noticed that nearly every business now has some sort of digital solution. But I'm not even talking about the usual suspects – like food-ordering solutions, airline apps, or post-taxi apps.

Recently, I travelled on a local train. The train looked exactly the same as always (not particularly modern or digitised) but one thing was different – passengers could now order food to their seats. And all that with the help of a sleek-looking, well-working mobile app.

I'll say it again – it was a local train!

So, to get to the point: today, in a world filled with digital solutions, it is important to be precise, to offer something that really plays into the user's needs and offers value. Because in such a competitive reality, a superb customer experience is everything.

From that perspective, it's not only important to consider the here and now, but also to be ready for the future. And, of course, none of us know what will happen in the future.

However, we can try to predict it – by analysing trends.

That's why the trend is your friend. But what even is a trend?

It may sound like a trivial question. However, the popular understanding of the word may be different from the more academic perspective–which we're considering here–so it will be useful to define it first. Importantly, a trend doesn't always equal popularity.

Our research team understands a trend as a directional process of change indicated or determined by signals and symptoms visible in social life, which vary in intensity.

That's why, to give you insight into the possible future of such a crucial topic, we discuss four key directions of change in digital Customer Experience (CX) in this publication:

- context;
- forecasts in form of two changes, which in the future may become more widespread and currently represent a development potential;
- symptoms in the form of implementation examples - cases;
- suggestions at the level of organisation and products/services.

The report's purpose is to outline the potential of the future that may influence the generation of new ideas and solutions – with a focus on CX. The directions we take a look at in this report are the result of qualitative research, including:

- the analysis of existing data;
- the analysis of selected case studies;
- a cross-cultural analysis.

Happy reading!

Sonia Przybył
Insight Manager | Flying Bisons

So, would you like to know what the future holds?

Trend 01

Self-regulating perfections

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[MEANING OF A TREND]

People always dreamt of living forever. But since that's not possible, we had to settle for the second-best thing. Longevity.

Prolonging one's life is one of the most vital human desires. Recent demographic changes (coupled with the experiences of the pandemic) have made this longing more actionable than a healthy diet or regular exercise.

In that context, the theme of the first trend – self-regulating perfections – refers to a well-known idea of development (in biological terms), as well as, to some extent, the redefinition of health (its perception, form, quality, and all related; even superhuman artefacts).

Why it arose - context

Forecasts predict that by 2050, Europe's population aged 60 and above will account for nearly 40% (in numbers, an estimated ratio of 161 million to 236 million), with over 10% of Europeans being over 80 years old. According to the Polish Central Statistical Office (GUS), the number of people aged 60 and above in Poland is expected to rise to 10.8 million by 2030 and reach 13.7 million by 2050, representing 40% of Poland's total population.

An ageing society entails not only demographic changes but also shifts in healthcare, both on a public and private level. These changes are linked to potential improvements in the quality and length of life, enhanced personalised preventive care, and solutions to problems related to the geriatric care deficit.

According to the forecasts of the Central Statistical Office (GUS), in 2050 Poland's population of people aged 60 and older will reach

40%

Life monitoring

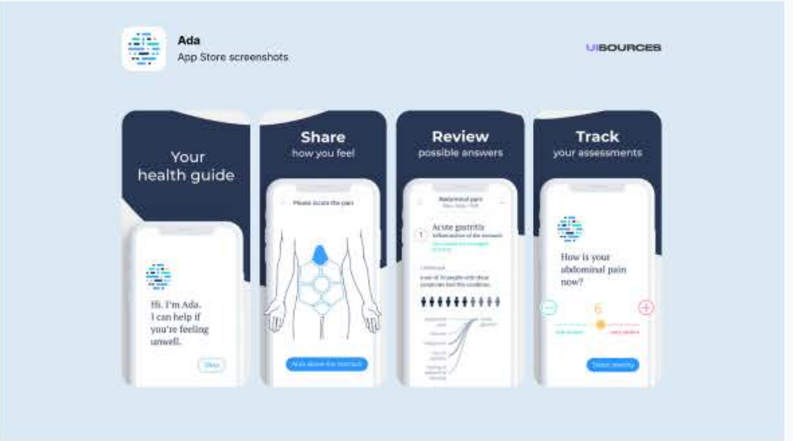
The COVID-19 pandemic drew attention to remote health monitoring with support of wearable technologies as well as genetic and genomic testing.

This can support the overall public health information system by providing insight about the quality and state of the population's health. It can also produce a dataset that could be used to transform the publicly accessible healthcare system.

But the data collected at the genetic level can serve not only the general population but, above all, should be perceived as a source of building personalised knowledge for each user to monitor the state and quality of their health.

Current monitoring systems mainly rely on solutions such as: real-time mapping of blood and pulse activity results and key parameters for users, e.g., tracking body temperature. There are also self-diagnosis solutions that not only serve prevention but also address current and future issues – related to the accessibility and cost of medical services, concerns about leaving home, lack of time for doctor visits, and many other problems that hinder face-to-face consultations.

The implementation of mass-scale changes in life monitoring would build awareness of self-observation habits and prevention while also providing a set of population data that would enable the development of preventive diagnosis of systemic diseases, directly improving the quality of life.



Source: **add.com**

Source: **eviering.com**

Self-improvement

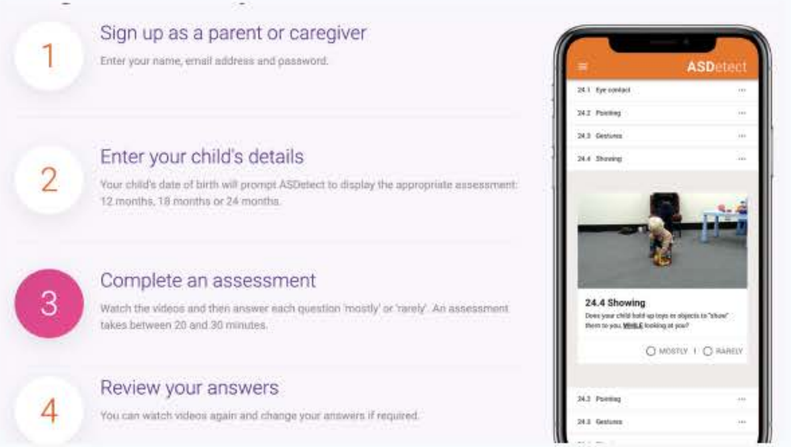
The next step is transitioning from monitoring and preventive diagnostics to maintaining a high quality of life - extending survivability at the population level - are self-improvements.

In the realm of concepts, this allows for a direction based on the synergy between AI and synthetic biology, enabling the creation of programmable life forms – xenobots. Less than four years ago, the first was created from skin and heart muscle cells at the blastula stage, taken from the African clawed frog.

Introducing xenobots into the human body could potentially extend its lifespan. This would be possible through real-time disease localisation in early or potential pathogenic states and daily supplementation of vitamin and mineral deficiencies.

At this moment, it remains a vision grounded between the paradox of self-improvement and self-regulation – which may sound overly futuristic and highly hypothetical. However, it could be the next step towards bringing humanity closer to the golden grail of immortality through continuous and current "repair" of the human body.

Source: **technologyreview.com**



Source: **asdetect.org**

Implementation

- → Developing organisations that, as part of the values of culture and internal policy, care for their employees' physical and mental health, building a work routine that supports the well-being of all stakeholders.
- → Building medical data sets to improve the quality of prognostics in public and individual diagnostics.
- → Focusing on developing products and services that can develop models indicating potential population health risks at a holistic level.
- → Expanding parameters and individualising services intended to serve the user to monitor key parameters – for example, the progress in physical activity or caloric intake.

Łukasz Białozor

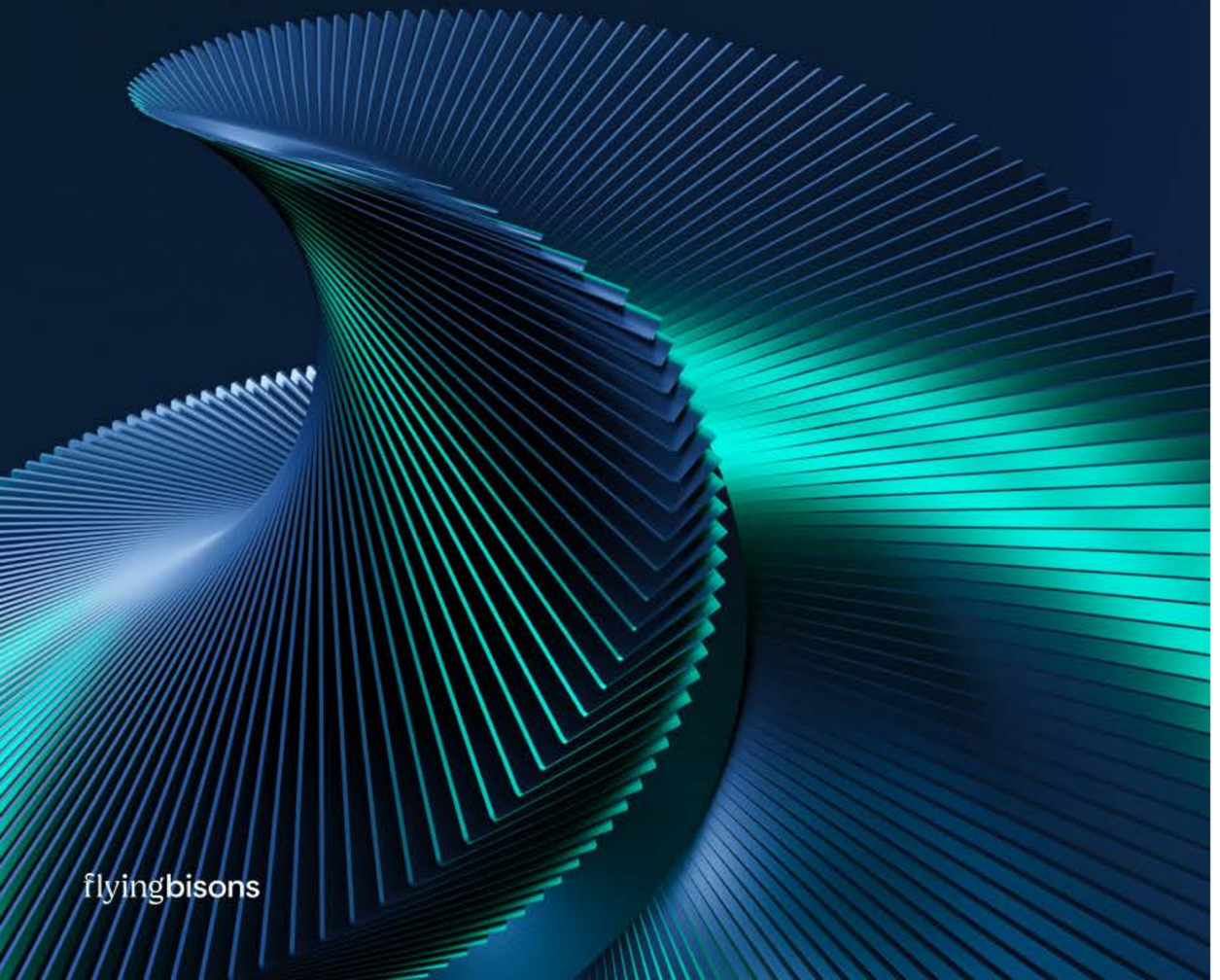
Senior Digital Analytics Consultant

> “ We undoubtedly need to pay attention to the accessibility of digital services for older people. In the context of self-regulation, this means creating user-friendly interfaces for different age groups and including features that increase convenience and safety.

Despite the privacy controversy, we can imagine systems that use health data for personalisation but do so anonymously. Such systems do not collect or store sensitive data and can, at the same time, provide more tailored solutions. For example, the private mode in Chat GPT offers advanced ML model capabilities while maintaining complete privacy. By focusing on these two aspects, we can design solutions that better respond to the users’ individual needs while ensuring their privacy and the availability of services.

Trend 02

Zero Trust



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What do Facebook, Microsoft, Marriott, Yahoo, and Twitter have in common? They all have been hacked. All in recent years.

For example, in 2021, cybercriminals exploited Facebook's vulnerability to scrape user profiles for customer data. Names, phone numbers, account names, and passwords of over 530 million people leaked to the public.

And if such giants can be cyber attacked...

Thus, in a world dominated by data, the Zero Trust direction trend is becoming increasingly evident. It's all about emphasising the protection and management of data in a way that builds cyber-resilient systems, internally and externally, regulating the knowledge resource concerning individuals, organisations, and entire socio-political systems.

Why it arose - context

Apart from the very public examples listed above, in January 2021 alone (Imperva report), 878.17 million records worldwide were breached, indicating an upward trend compared to previous years.

The European Commission provided information regarding the losses associated with cyber-attacks in 2020, which amounted to 5.5 trillion euros. That's twice as much as five years earlier. International organisations are implementing strategic planning and initiating new policies and initiatives related to cybersecurity, moving towards the concept of Zero Trust.

Both public and private entities have initiated campaigns and actions aimed at redesigning current data structures to increase cybersecurity awareness, along with compliance with political regulations and security programs (e.g., GDPR, NIST-CSF, GLBA).

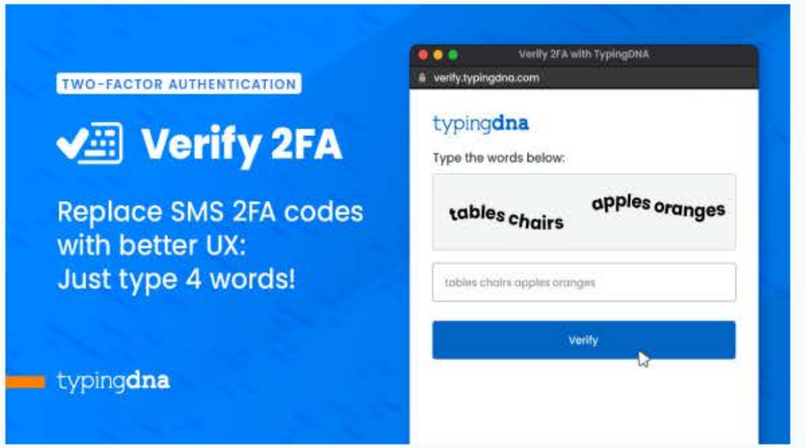
Personal Verification

One of the increasingly popular directions for user authentication are biometric methods. They include behavioural biometrics, which, through various parameters such as writing style, movement habits, dynamics, and keystroke pressure, can verify and recognize users.

This means a personalised form of consumer authentication, which can positively impact the limitation of personal data misuse due to the theoretical difficulty of "forging" psycho-physical behavioural elements.

Behavioural biometrics can also contribute to expanding databases concerning information collected about users, shaping new profiling segments through mapping mood changes, which can influence customers' decisions during consumer activities.

A persistent and continually growing source of user data can also affect product and service development through continuous optimization.



Source: **typingdna.com**

Source: **mastercard.us**

Cyber-resilience

To protect internal and external data, organisations will need to adopt new technologies - which are currently not used. This may involve the rise in popularity of dual authentication systems and securing endpoints or Wi-Fi networks.

At the global level, regulatory structures will be developed, with regulators' role, influence, and scope of responsibility strengthened. The verification of solutions and the introduction of legal regulations will also be accelerated and streamlined to shape, monitor, execute, and educate organisations and users on data protection.

At the organisational level, the trajectory of adapting to this changing direction will heavily concentrate on actions related to building a trust architecture within organisations. This will increasingly include distributed ledgers, such as blockchains.

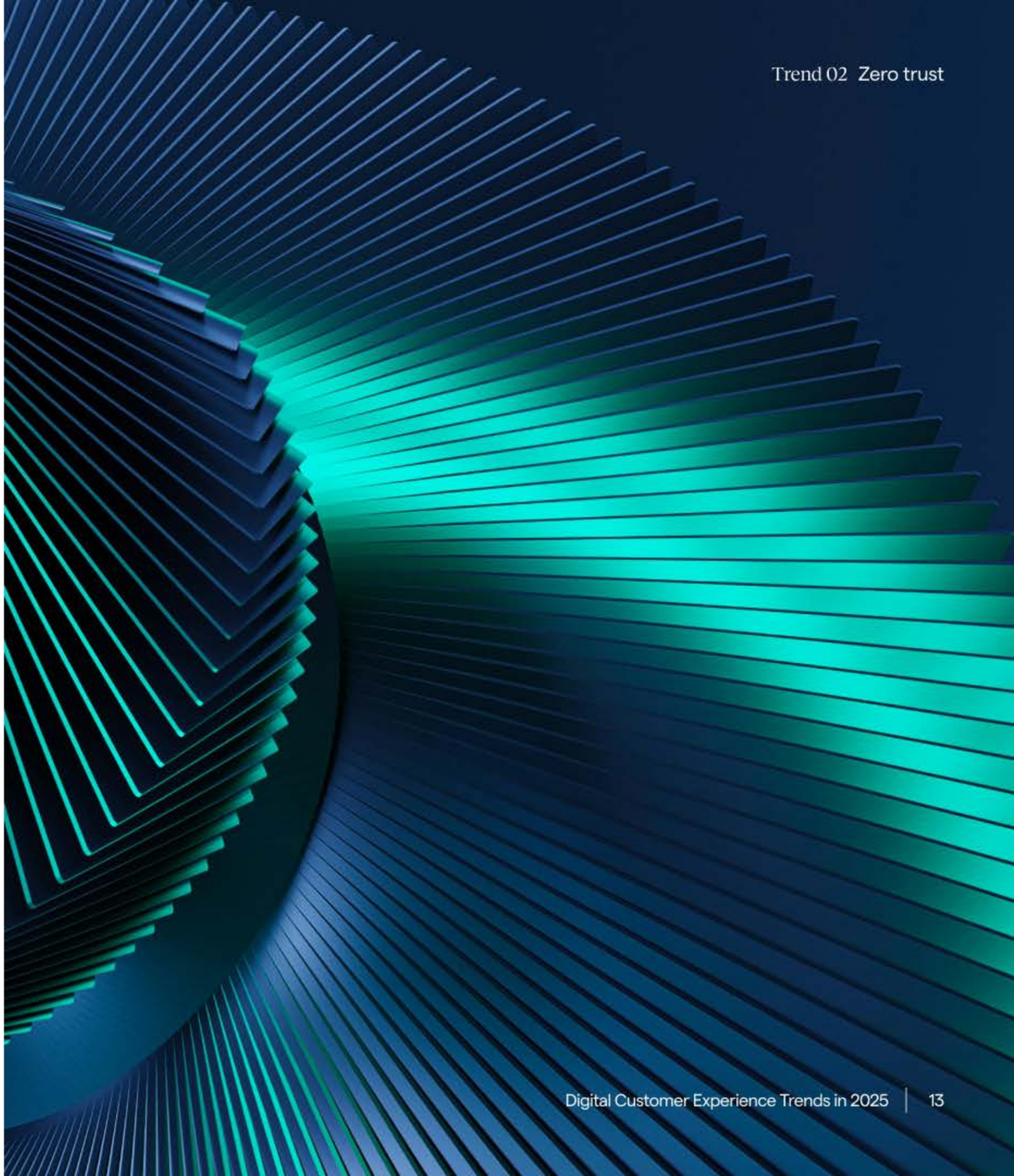
In the long-term perspective of organisational activities, this will accelerate implementing quantum encryption concepts (and using quantum particles)–such as superposition and entanglement–to build technologies to enhance data security.

Source: **archdaily.com**

Source: **hpcwire.com**

Implementation

- → Zero trust framework: implementing and popularising data systems security within the enterprise structure (internal and external, regarding employees and users).
- → Investing in expanding data authentication systems, threat detection, and response automation.
- → Modifying and developing the customer journey in a way that allows high convergence of experience, as well as information regarding the user's habits and action patterns.
- → Building knowledge and awareness about personal data protection at the population level.
- → Continuously collecting data resources that are authenticated and then analysed – and then participate in optimising products and services.



Marek Kava

Backend Team Manager

> A key element in data protection is user information, especially collected in large quantities on social media platforms. This data is a potential fuel for various solutions.

For example, in both sales and election campaigns, as demonstrated by the Facebook–Cambridge Analytica data scandal. This is why it is crucial to know exactly where data is stored and who has access to it. Therefore, it's essential to precisely determine where data is stored and who has access to it. It's also worth auditing procedures regularly to ensure the ongoing effectiveness of protective measures. Thus, when designing solutions, a number of adopted principles and standards should be applied.

The International Organization for Standardization (ISO) regularly releases the ISO/IEC 27002 standard, which provides a code of practice for information security controls. It covers security policy, risk management, physical security, access control, and cryptography.

Trend 03

Glass box

[MEANING OF A TREND]

In the past, companies were like black boxes. They had brands painted on the outside walls – but the truth was hidden inside, invisible to the public. Today, the trend is different.

Organisations are transforming into glass boxes. Now, anyone can look inside. See the people, the culture.

This direction is not new. It was shaped over many years, primarily referring to the impact of public and private organisations on the internal and external reality. And the overarching value of this change is transparency.

Why it arose - context

According to the European Commission, digital technologies account for 8-10% of energy consumption and 2-4% of greenhouse gas emissions. From a global perspective, these may not be significant percentage shares, but they still represent large absolute amounts. One of the European Commission's main priorities is to develop solutions to achieve Europe's climate neutrality by 2050.

The prolonged wave of compulsive consumerism has altered the production cycle of products, including digital ones, by reducing their lifespan. Research shows that extending the usability period of products like smartphones by just 12 months could reduce CO2 emissions to 2.1 million tonnes annually by 2030, equivalent to removing about 1 million cars from the roads.

Systemic Design

The direction of systemic design in the concept of design thinking is seen as a design process where we pay attention to the sought-after solution and the entire ecosystem.

In this direction, we consider the whole as a crucial value, and the perspective of responsibility for the developed solution is taken into account, considering:

- → different stakeholder groups and users;
- → the operating system, technology, etc.;
- → the external environment in which the final result of the work will be placed;
- → the overall impact and consequences of the product/service in the external circuit.

Designing with the whole system in mind also influences the trend towards mass inclusiveness. Digital inclusiveness is a crucial element currently not fully considered at the design level.

Integrating online and offline dimensions should contribute to building omnichannel solutions that consider different types of segments at the psychographic level and from the perspective of social exclusion, generating open and accessible technological models for many – rather than selected social groups.

Source: **tonyschocolonely.com**

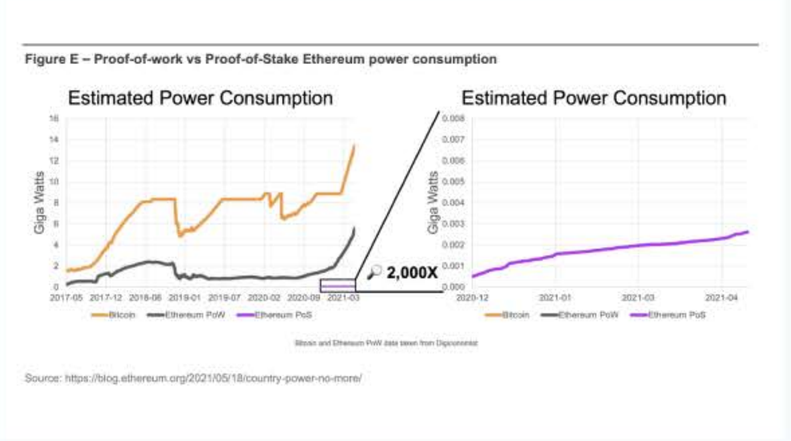
Source: **iwillalwaysbeme.com**

Sustainable Optimization

Multidimensional design - considering various elements of reality - is also linked to ongoing data collection and a deep understanding of the environment and its users. Hence, the optimisation of digital products aims to map user needs by maintaining a constant relationship with them in terms of information and artefacts.

This allows designing changes that address specific needs without unnecessary design overproduction (creating new products and services or changes and updates that are made solely for the idea of creation).

Within this direction of change, it's also essential to work on deficits as a value that should set a certain design standard, primarily related to reducing negative consequences at the design and user levels (during implementation and interaction). Thus, making choices in the design process regarding aesthetic values versus environmental values (implementation weight) will be crucial.



Source: **changelog.com**

Source: **coindesk.com**

Implementation

- → Glass box: activities within an organisation should be transparent to all its stakeholders (employees and consumers/ users).
- → Practices such as server virtualisation, data centre consolidation, and renewable energy use to reduce computers' energy consumption have a lot of potential.
- → It's important to invest in developing products that can support carbon capture and storage to reduce carbon emissions from industry and energy production.
- → Focusing on code optimization to minimise energy consumption and designing software that is low-cost in terms of maintenance and updates.

Kuba Kopecki

UX Designer

> Digital products do not exist only in the digital space – but also as part of society, politics, the environment, and other spheres from which it draws and influences us equally.

The responsible design may, therefore, indicate focusing on accessibility and inclusiveness, reducing the product's carbon footprint, ensuring ethical working conditions, taking into account the phenomenon of digital overload, or avoiding so-called dark patterns. This list is not finite, and the perfect product does not exist.

But I believe every person would like to design the finest products in many aspects. It's worth considering the world we create with our work and where we want to live. What and how we do it every day builds our future.

Trend 04

Digital feelings

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[MEANING OF A TREND]

Do you see the Apple Vision Pro spatial invention as a success - or a flop? Regardless of our individual opinions, similar solutions will be a thing of the future.

Augmented and virtual reality will play a more and more significant role with each year. And this will enable the construction of social spaces – specifically, multidimensional online (and offline) places.

And all of this will touch on a very touchy subject – feelings. With this change, digital technologies will redefine cognitive models at the level of recognising and defining images, experiences, and thoughts. Ultimately, this (nearly) means digitising sensory areas of the human body and mind.

Why it arose - context

According to the Markets and Markets report, augmented reality is projected to grow from $15.3 billion in 2020 to as much as $77 billion in 2025.

For over ten years now, the Digital Olfaction Society has been organising congresses. Research is ever ongoing. These developments focus on issues and areas for development related to digital olfaction. All to accelerate further areas of experiential digitisation.

If you're looking for an interesting example to sum these developments up, here it is – in 2020, Aryballe raised €7.9 million in funding for digital scent technology to detect and identify various odours.

The number of AR and VR headset units sold in 2024 is estimated to reach

41 mln

Experiencing Experiences

Augmented reality is already a clear direction based on engaging and stimulating human senses. It focuses on developing experiences beyond the familiar offline sphere.

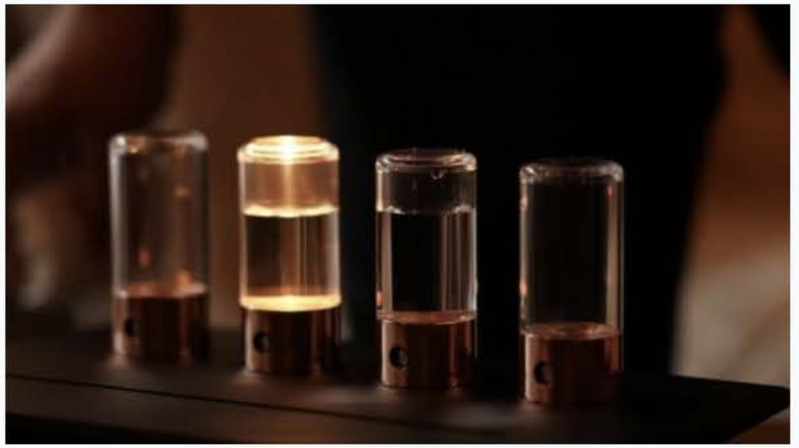
The scope of this change somewhat reinforces the perspective of "humanising" technological solutions in a way that generates stimuli for experiencing experiences (tangible sensations) and constructing a parallel reality in the present moment.

The development of digital feelings focuses on three main areas:

- → digitisation of taste and smell,
- → touch,
- → human emotions.

Thanks to discoveries by the Japanese scientists, digital scent technology currently allows for the transmission of dozens of scents that users can experience without actually smelling them. However, the technology's current state is insufficient for broad implementation. Realistic 1:1 reproduction of textures and physical warmth at the level of object contact currently remains unachievable. Nonetheless, solutions are being designed to serve as a substitute for touch. Applications and simulators are emerging. They stimulate kissing sensations even when users are physically apart.

On the other hand, the digitisation of emotions is evolving naturally by creating mediated social communities rooted in users' experiences in the virtual world. Technologies are currently being developed to enable the transmission of emotions in the form of stimuli that users can send and receive.



Source: **scentee-machina.com**

Source: **flickr.com**

“In touch”

Building an intensified experience relocates the significance of interactions. Today we are (indirectly) constantly "available", connected in networks resembling a human Internet of Things cyber reality.

As a result, a natural development direction may follow the visions suggested by the forecaster Faith Popcorn, who mapped a possible scenario that expands the current version of BCI (Brain-Computer Interface). In this scenario, automation of mundane everyday behaviours – such as ordering groceries – would become possible by placing a network in the human brain for remote internet connection.

The development of BCI could lead to:

- redefining operations that people no longer need to perform, altering the role of human nature itself,
- dematerialising hardware such as a mouse, keyboards, monitors, and computers – ultimately, all electronic devices,
- building constellations of inter-species (human and machine) systems,
- shaping a reality where thoughts cease to be solely the most individual human domain and become an accessible data set, much like maps in a game.

Source: **techslang.com**

Twitch streamer plays Elden Ring with an electroencephalogram (Image via Perrikaryal/Twitch)

Source: **sportskeeda.com**

Implementation

- → Implementing solutions that will support the employee's path in developing key competencies for both the organisation and the individual.
- → Augmented reality solutions can positively impact maintaining organisational interactions, especially among companies that have decided to work remotely.
- → Implementing tech solutions that eliminate threats by digitally defining odourless odours without using harmful substances/ chemicals.
- → Investing in and creating solutions based on BCI (Brain-Computer Interface) that will enhance the user experience. At the same time, performing more precise and automated actions.

Jan Wąsowicz

UX Designer

> “ For me, the most important and exciting technologies are those related to touch and haptics.

Reflecting touch is crucial from a social perspective, as demonstrated, for example, by the lockdown. In the long-distance relationships developed in the 21st century, people begin to miss touch after some time, and conversations via camera are not sufficient. But also from a business perspective, there are many physical products people might want to touch and feel before making a purchase – for instance, in the fashion and textile market.

Additionally, haptic technologies can be used to provide feedback to users – which has been working for years, for example, in console pads.

Research team

Sonia Przybył

Graduate of Sociology at the University of Adam Mickiewicz and Innovation Management – design management at USWPS – School of Form. Currently pursuing a PhD in trend analysis and forecasting.

Since 2018, she has been teaching at universities in the field of research supporting innovation, design management and trend analysis. For the past years, she has worked on design processes that support innovation in businesses.

Since 2022, she has been associated with Flying Bisons as the leader of the research team and mentor at the Flying Bisons Academy. She is passionate about discovering what is invisible and indicating possible directions for the development of new products and services as well as improving existing ones.

Kamila Rodzinka

A Psychology graduate from Jagiellonian University, she has honed her professional skills by conducting exploratory research and usability tests for renowned brands across various industries, including healthcare, e-commerce, beauty, crypto, finance, gov and the public sector.

Since 2020, she has been an integral part of Flying Bisons, specialising in research, workshops, diagnosing user expectations, issues, needs, and experiences, as well as shaping the direction of product changes and digital solutions.

As a UX research mentor at Flying Bisons Academy, she trains aspiring UX researchers in the art and science of user-centred approaches and research methodologies.

Jakub Stróżyk

Jakub holds a bachelor's degree in Cognitive Science from Adam Mickiewicz University and a master's degree in Creative Management from Collegium Da Vinci. He has gathered valuable experience through a diverse array of research techniques, such as usability tests, in-depth interviews, and focus groups.

Since April 2023, Jakub has been working at Flying Bisons, specialising in user research and analysis, creating research reports, conducting workshops, and delineating pivotal directions for digital solution development.

Jakub's passion lies in understanding the psychology and cognitive reasoning behind user behaviours, always striving to ensure users of digital products feel understood and satisfied.

Future is now

If you need support in research and development to create new solutions or improve existing products and services, feel free to contact us.

We are also a partner of postgraduate studies
"Forecasting and implementation of trends" at Collegium da Vinci.

Resources

Reports

imperva.com

digital-strategy.ec.europa.eu

climate-pact.europa.eu

eeb.org

marketsandmarkets.com

Self-regulating perfections

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technologyreview.com

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